



Tunable White LED Dimming Module

The SLD DimTW2 is a CV Tunable White LED dimming module. This unique dimming module accepts 0-10V/1-10V control signal and enables smooth, dynamic color temperature shifts of 2000K to 8000K. Depending on the application situation, this plug-and-play dimming module creates eye-catching, color temperature changing effects without color distortion. The efficient Tunable White LED dimming module continues to be a pioneer in the market opening up ease of upgrade and options for color tuning applications that improves the dynamic of light.

Features

- Wide range DC input 8-48VDC
- Flicker free 0-100% dimming and color temperature changing
- High Efficiency up to 97%
- High precision dimming ratio : >1:1000
- Fully isolated plastic housing
- Comply with EN55015 and FCC Part 15 without additional input filter and capacitors
- Suitable for LED lighting and signage applications
- Compact size, high reliability
- 3 year warranty

Applications

- Architectural Lighting
- Effect & Contour Lighting
- Office General Illumination
- Warehouses
- Street Lighting
- Signage
- Strip Lighting
- Swimming Pools/Fountain lighting

SLD-DimTW2



DC/DC (0/1-10V + PWM)
LED Dimming Module



| Model | Input Voltage Range | Input Control | Channel Output | Output Voltage Range * | Max. Output Current (A) ** | Max Output Power (W) | Power Efficiency (Typ) |
|------------|---------------------|---------------|----------------|------------------------|----------------------------|----------------------|------------------------|
| SLD-DimTW2 | 8 - 48 V | 2 | 2 | Vin - 0.2~0.5V | 5 | 240 | 97% |

*- SLD-DimTW2 dimming module requires an external CV LED driver, connected to the DC input, and should not exceed the above input voltage range.

** UL marking: for products manufactured in Vietnam only, effective October 2020.

Input Specification

| | | | |
|-----------------------------|---|----------------------|--|
| Voltage Range | Please refer model table | Input Current | 5.1A max (per channel) |
| Control Voltage | 0/1-10VDC Dimmer *The external control source to the SLD-DIM purple and grey control wires should have the capability to sink a min. of 10mA for multiple SLD-DIM modules connected together. * A minimum sink current of 2mA is recommended for a single module | Control Range | 0-100%v ~1V = 0% light output 10V =100% light output |
| Short Circuit Protection | Hiccup-Mode, Auto-Recovery upon removal of short circuit condition. | Over Voltage | Auto Recovery upon input voltage under Vin (max) |
| Over Temperature Protection | Auto recovery upon operating temperature <105°C | Under voltage Logout | Auto Recovery upon input voltage over Vin (min) |

Output Specification

| | | | |
|------------------|----------|----------------|-------------------------|
| Output Frequency | 1kHz PWM | Output Current | 5A max. at full load ** |
| Power Efficiency | 97% Typ | Dimming Ratio | 1:1000 |

** - SLD-DIM dimming module max. output current is dependent on LED driver output current , which should not exceed the Class 2 maximum of 5A or 100W per output channel.

Environmental Specification

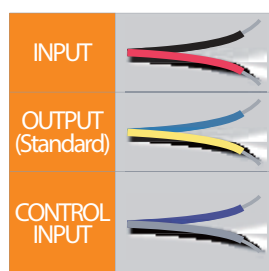
| | | |
|---------------------------|---------------|-------------------|
| Ambient Temperature | Storage Temp | Relative Humidity |
| - 20°C - 60°C (Full Load) | - 40°C - 85°C | 5% - 95 % |

Compliance / Safety

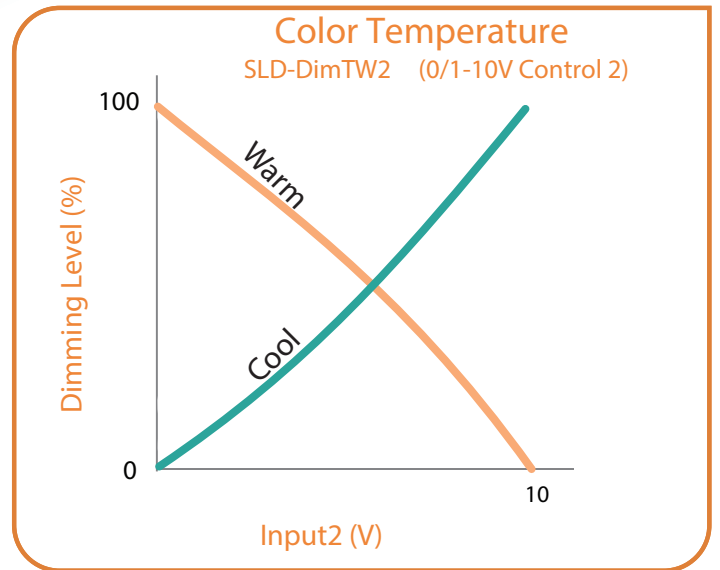
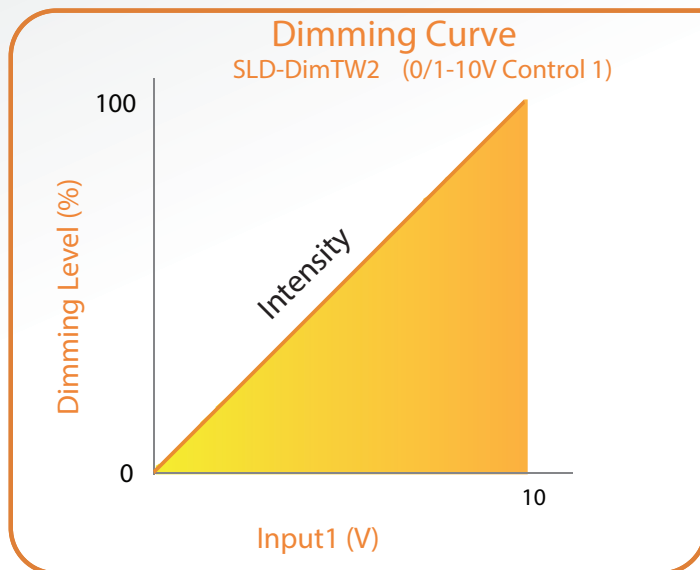
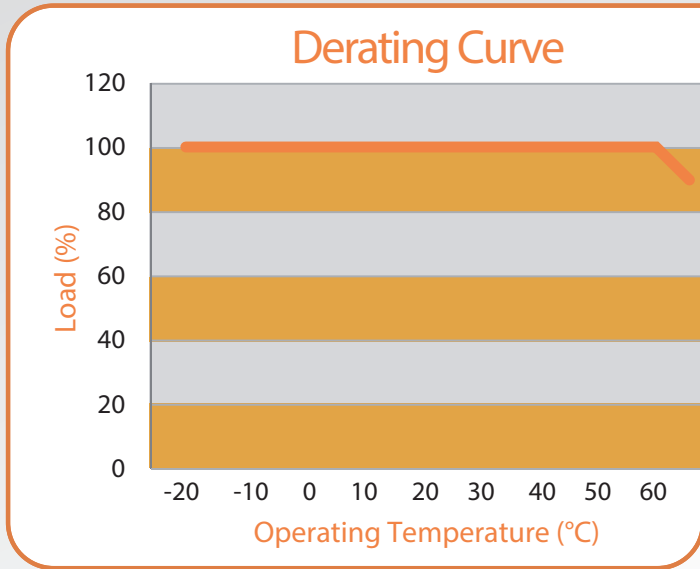
| | |
|-------------------|--------|
| Safety Standards: | UL244A |
| Weatherability: | IP 65 |

Mechanical Specification

| | |
|-----------------------|--|
| Power Unit Dimensions | 98mm (L) x 44mm (W) x 14.5mm (H) |
| Case Design/Material | Polycarbonate White |
| Wire Length | 6 inches 152.4mm |
| Wire Size | a. 18AWG standard, 300V, 105deg C (DC input and Dim Output wires) b.22AWG standard, 300V, 105deg C(0/1-10V control wires) |

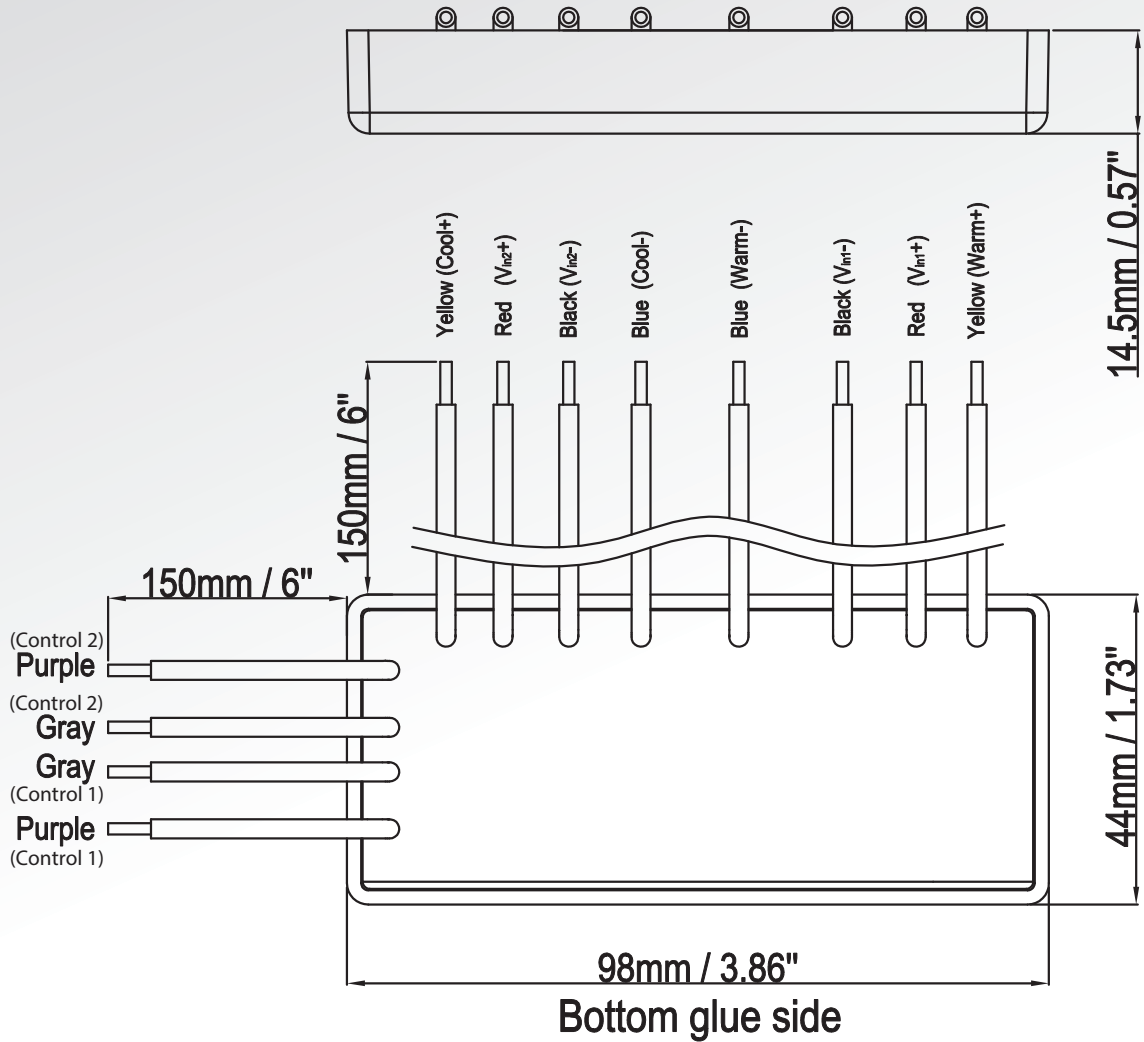


Performance Curve



Mechanical Diagram

SLD-DimTW2(Ver. B)



| Input Wire | | Output Wire | | Control Wire | |
|------------|--------|-------------|--------|--------------|----------------------|
| Black | Vin1 - | Yellow | Warm + | Purple | to 0/1-10V Control 1 |
| Red | Vin1 + | Yellow | Cool + | Gray | to 0/1-10V Control 1 |
| Red | Vin2 + | Blue | Warm - | Purple | to 0/1-10V Control 2 |
| Black | Vin2 - | Blue | Cool - | Gray | to 0/1-10V Control 2 |

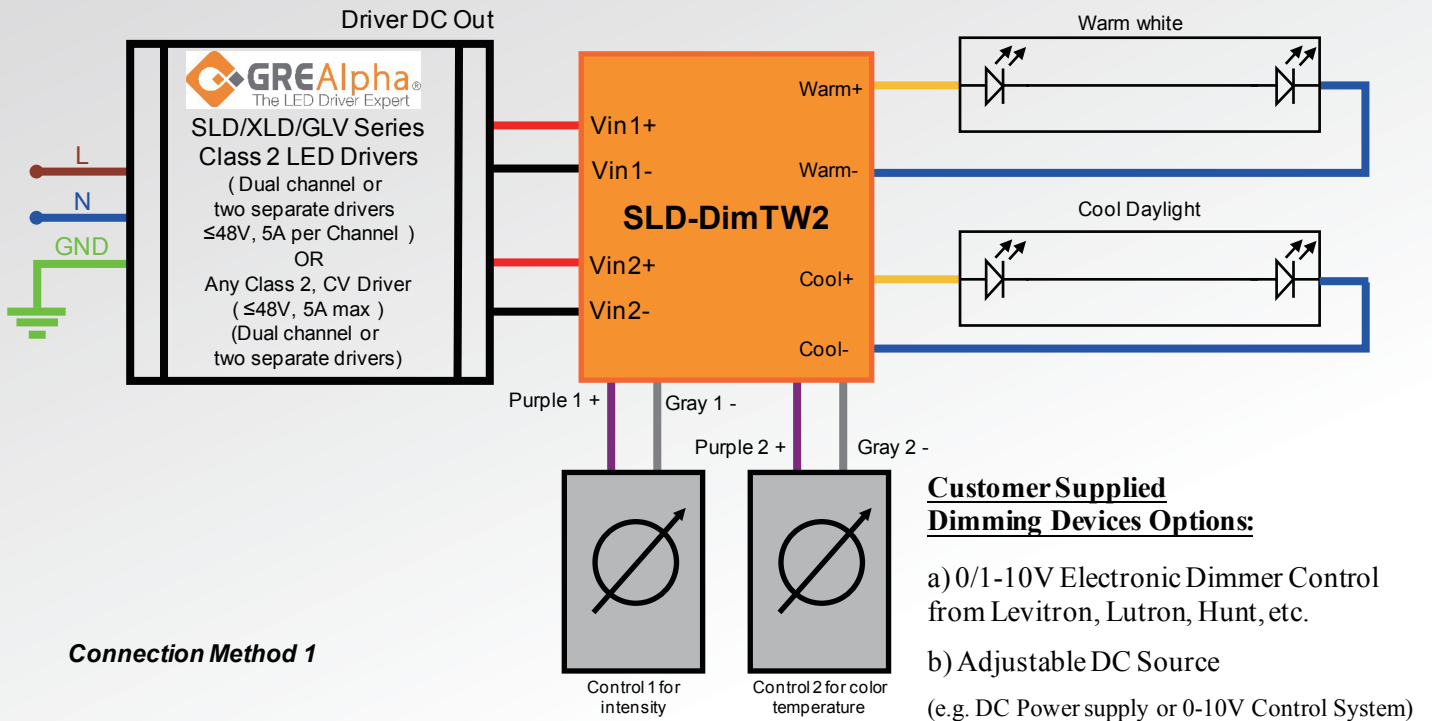
Packing Information

0.10 kg/pcs ; 100pcs/carton;

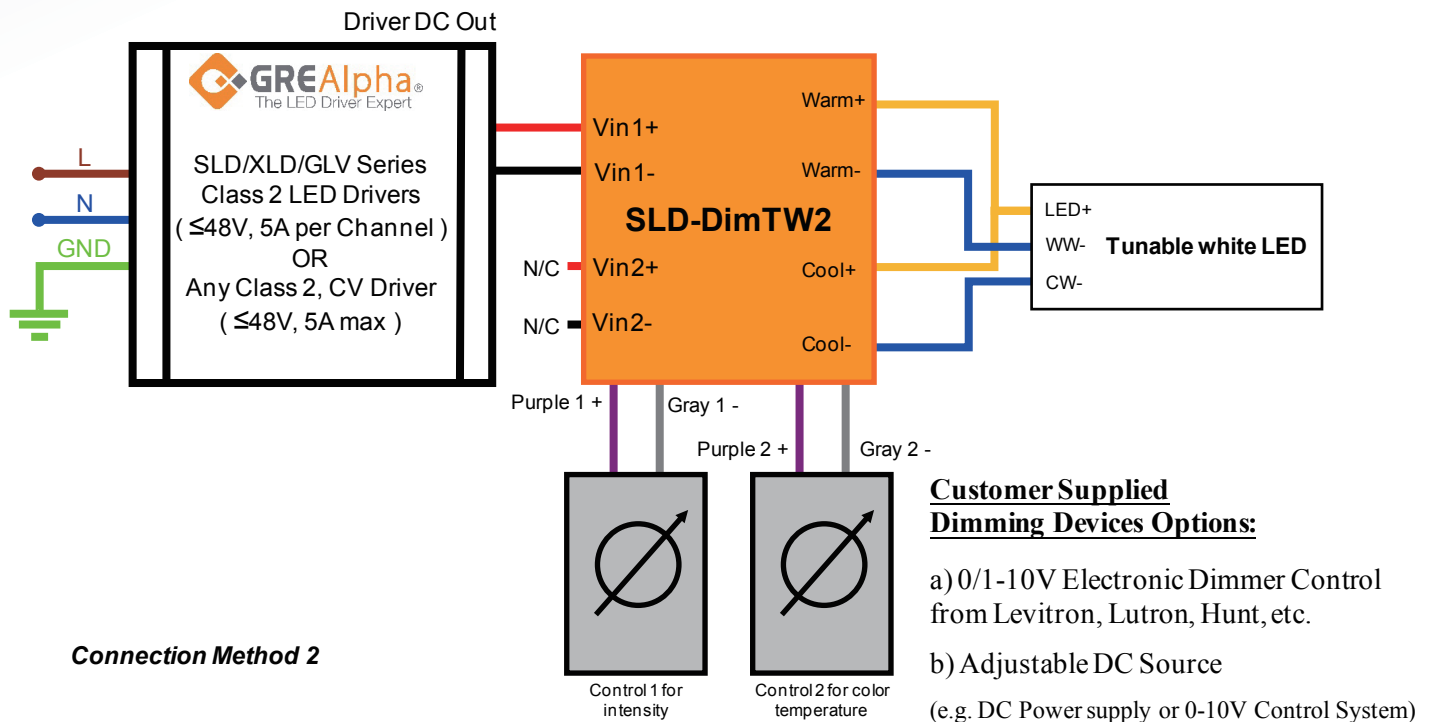
12.0 kg /carton; L270xW220xH430 (mm)

Wiring Diagrams

SLD-DimTW2

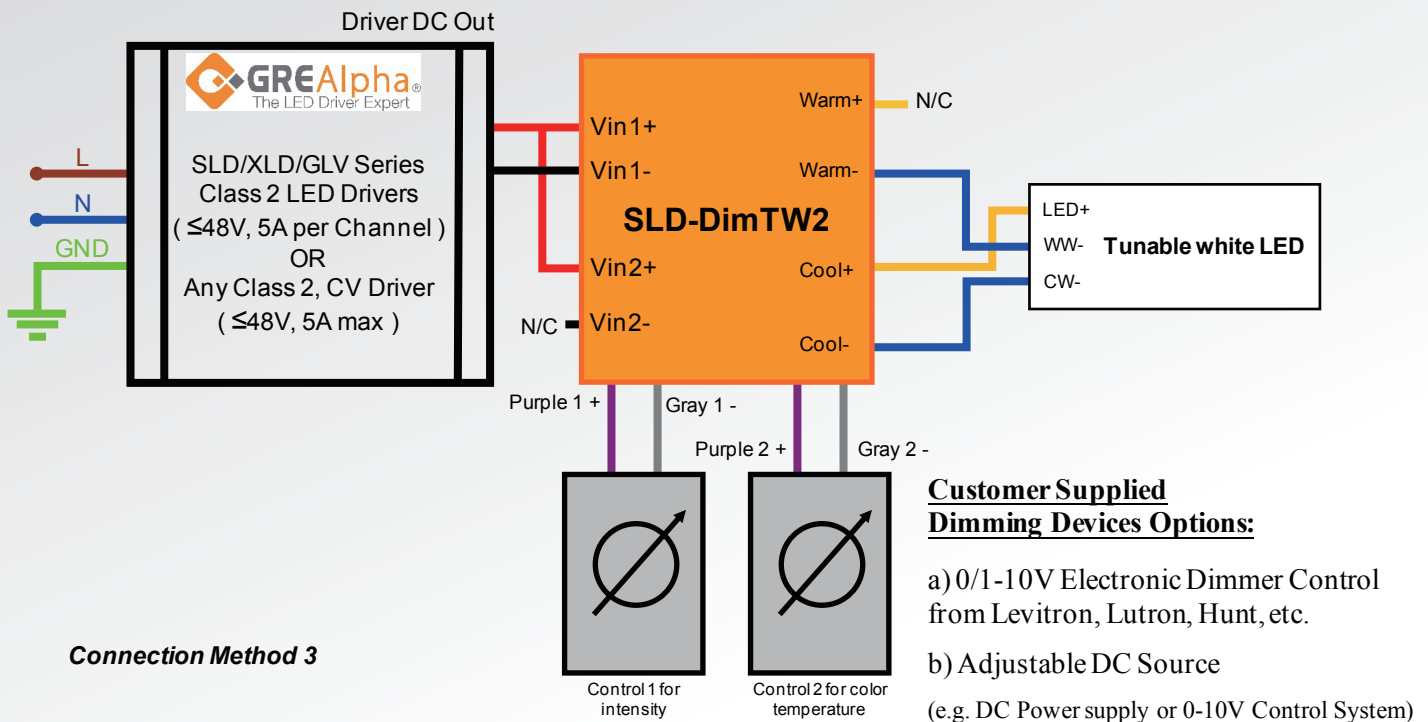


* 0-100% flicker-free performance not guaranteed when used with non-GRE Alpha CV Drivers



* 0-100% flicker-free performance not guaranteed when used with non-GRE Alpha CV Drivers

Wiring Diagrams



* 0-100% flicker-free performance not guaranteed when used with non-GRE Alpha CV Drivers

GRE Alpha undertakes extensive testing on its dimming modules to ensure dimming compatibility and performance to our best ability. However due to rapidly evolving technology and the wide number of dimmers available GRE Alpha makes no specific recommendations on dimming system selection for its dimming modules and there are no warranties of performance or compatibility implied. Please test product for dimming compatibility before use.

Information furnished is believed to be accurate and reliable. However, GRE Alpha assumes no responsibility for the consequences of use of such information nor for any infringement of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of GRE Alpha. Specifications mentioned in this publication are subject to change without notice. This publication supersedes and replaces all information previously supplied.

The GRE Alpha logo is a registered trademark of GRE Alpha Electronics Ltd.
All other names are the property of their respective owners